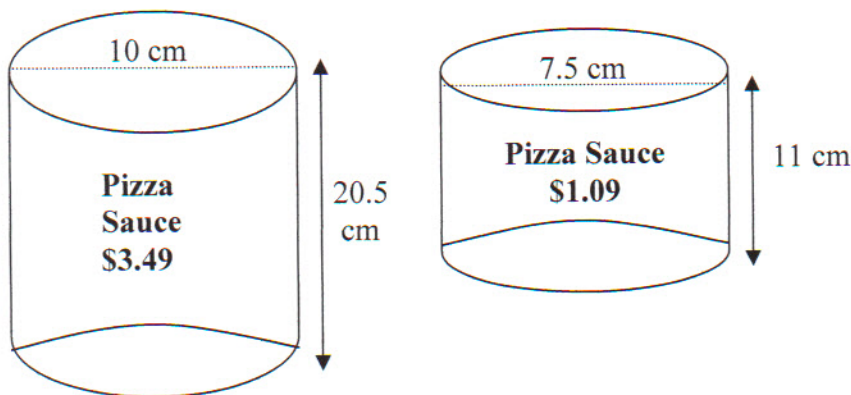


SA & VOLUME WORD PROBLEMS

| | Incomplete 0 | Unacceptable 1 | Poor 2 | Acceptable 3 | Good 4 | Outstanding 5 |
|------------------------------------|---------------------------------|--|--|---|---|---|
| TECHNICAL CORRECTNESS OF SOLUTIONS | All or most solutions are blank | No solutions are correct or many left blank | <u>Few</u> solutions are technically correct | <u>Some</u> solutions are technically correct | <u>Most</u> solutions are technically correct | <u>All</u> or <u>almost all</u> solutions are technically correct |
| PRESENTATION OF SOLUTIONS | All or most solutions are blank | No evidence of presentation or many solutions left blank | Solutions to <u>few</u> problems stand alone | Solutions to <u>some</u> problems can stand alone | Solutions to <u>most</u> problems can stand alone | Solutions to <u>all</u> or <u>almost all</u> problems can stand alone |

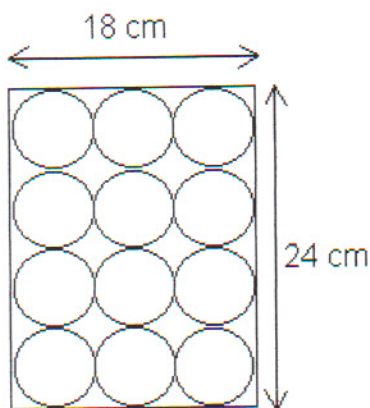
1. If both of the pizza sauce cans shown below are cylinders, which is the better buy? Justify your answer.

[9]



2. Cans of soup are often packed in boxes as shown in the diagram below. How much area is wasted in between all the cans?

[7]



3. A cubic tank with 4.6 meter edges is filled with water. How much water will be left in the cubic tank if it is used to fill a cylindrical water truck with a radius of 2.2 meters and a length of 4.6 meters?

[3]

4. How much cat food would fit into a can that has a height of 14.5 cm and a diameter of 9 cm. How much paper is needed to make the label?

[4]

5. A square based pyramid has a base area of 36 cm^2 and a volume of 96 cm^3 . What is the surface area?

[8]

6. Three identical tennis balls with an 8 cm diameter are stacked inside a cylindrical container. Calculate the Volume of this container and the Surface Area.

[5]